

WHAT IS CLAIMED IS:

1. A digital-to-analog (D/A) converter with low skew and glitch, comprising:

at least one current cell outputting a different current amount; and

a current switch selectively enabling the at least one current cell in response to a digital signal externally supplied, the current switch having at least one MOS transistor having an adjusted aspect ratio so as to have a constant capacitance load regardless of the output current amounts from the at least one current cell,

wherein the D/A converter reduces skew and glitches occurring when the at least one current cell generating different output currents is turned on and off, due to the constant capacitance load.

2. The D/A converter as claimed in claim 1, wherein, in the at least one MOS transistor, a length L from a source to a drain of the MOS transistor times a width W formed in a vertical direction of the length L is constant regardless of the current capacities of the at least one current cell.

3. The D/A converter as claimed in claim 2, wherein a capacitance value is a total sum of parasitic capacitances among gates and sources of the at least one MOS transistor, the gates and drains of the at least one MOS transistor, and the gates and a substrate for the at least one MOS transistor.

4. The D/A converter as claimed in claim 1, wherein the current switches each have a turn-on resistance in inverse proportion to the current capacities of the at least one current cell.

5. The D/A converter as claimed in claim 1, further comprising a voltage controller for lowering a voltage level turning on and off the current switch to a minimum operation point of the current switch.

6. The D/A converter as claimed in claim 1, wherein the current switch alternately operates to form current paths for current sources between a drive voltage and a ground all the time.

7. The D/A converter as claimed in claim 1, wherein the at least one current cell is divided into at least two or more groups, and designed for one of the divided groups to have the same output current amount according to a thermometer type.